IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:	Barraclough	Examiner:	Manning, John
Serial No.:	09/740,263	Group Art Unit:	2623
Filed:	December 18, 2000	Docket No.:	8X8S.223PA
Title:	Network Interface Unit Control System And Method Therefor		

AMENDED APPEAL BRIEF

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Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Customer No.
40581

Dear Sir:

This Amended Appeal Brief is submitted pursuant to 37 C.F.R. § 41.37, in support of the Notice of Appeal filed December 20, 2006 and in response to the final rejection as set forth in the final Office Action dated July 11, 2006.

Authorization to charge all required fees is provided on the preceding Transmittal sheet.

I. Real Party In Interest

The real party in interest is 8x8, Inc., formerly Netergy Microelectronics, Inc., having a principal place of business at 3151 Jay Street; Santa Clara, CA 95054. The above-referenced patent application is assigned to 8x8, Inc.

II. Related Appeals and Interferences

Appellant is unaware of any related appeals or interferences.

III. Status of Claims

Claims 1-75 stand rejected and are presented for appeal; the pending claims under appeal are listed in the attached Claims Appendix, with appropriate claim status identifiers.

IV. Status of Amendments

No amendments have been filed subsequent to the Final Office Action dated July 11, 2006.

V. Summary of Claimed Subject Matter

The present invention relates generally to interfacing and controlling the interface of different communication systems and, more particularly, to network interface circuits and approaches for interfacing external service-provider networks with a target facility such as a residence. The present invention is exemplified in a number of implementations and applications, some of which relate to the following.

As is consistent with claim 1, an example embodiment is directed to an arrangement (*e.g.*, 180 of FIG. 1 and page 8:24 through page 9:5) for processing external-services data for use in a user facility that provides its users telephony-related services. The arrangement comprises an audio, video, and data signal bussing arrangement (*e.g.*, 140 of FIG. 1 and page 9) adapted to distribute audio, video, and data to designated points in the user facility. A plurality of telephony-based appliances (*e.g.*, 230 of FIG. 2, page 10:16-29) are communicatively coupled to the bussing arrangement, wherein the plurality of appliances provide bi-directional telephony services using at least one of: audio, video, and data signals. At least one data memory circuit (*e.g.*, 130 of FIG. 1 and page 13:13-39) stores external-services data and adapted to store

configuration data. A programmable network interface unit (NIU) (*e.g.*, 130 of FIG. 1 and pages 8 and 9) is adapted to store external-services data in the memory circuit and to communicatively couple the stored external services data from the memory circuit to the plurality of appliances in the user facility via the bussing arrangement as a function of the configuration data in the memory circuit. A user input device (*e.g.*, 250 of FIG. 2 and page 10:9-16) is adapted to access the data stored in the memory circuit, to program the programmable NIU by providing the configuration data and to command the NIU via the bussing arrangement to process the external-services data for use at a particular one of the plurality of appliances in the user facility.

As is consistent with claim 46, in another example embodiment of the present invention, a network interface system (*e.g.*, 180 of FIG. 1 and page 8:24 through page 9:5) interfaces different types of communication systems including a first user-based telephone communication system (*e.g.*, inside household 115 of FIG. 1 and page 8) and a packet-based communication system (*e.g.*, via communications line 120 of FIG. 1 and page 8). The system includes a data memory circuit (*e.g.*, 130 of FIG. 1 and page 13:13-39) that stores configuration data and packet-based data from the packet-based communication system, and a telephony-based user communication device (*e.g.*, 230 of FIG. 2, page 10:16-29). A processor arrangement (*e.g.*, 130 of FIG. 1 and pages 8 and 9) writes configuration data into and read configuration data from the memory circuit and provides data for presenting configuration information for accessing at the telephony-based user communication device. The processor arrangement is further adapted to process data received from, and exchange processed data between, the first user-based telephone communication system and the packet-based communication system, and, in response to the configuration data, also adapted to route selected information provided by the packet-based communication system and to route data stored at the data memory circuit to selected channels of the first user-based telephone communication system. User input means (*e.g.*, 250 of FIG. 2 and page 10:9-16) is adapted for inputting configuration-defining control signals. The processor arrangement responds to the configuration-defining control signals by changing the configuration data in the memory circuit and by rerouting selected information provided by the packet-based communication system to selected channels of the first user-based telephone communication system according to the configuration-defining control signals (*e.g.*, page 8:4-5).

As is consistent with claim 55, in connection with another example embodiment, a network interface system (*e.g.*, 180 of FIG. 1 and page 8:24 through page 9:5) interfaces

different types of communication systems including a first user-based telephone communication system (*e.g.*, inside household 115 of FIG. 1 and page 8) and a packet-based communication system (*e.g.*, via communications line 120 of FIG. 1 and page 8). The system includes a data memory circuit (*e.g.*, 130 of FIG. 1 and page 13:13-39) adapted to store data including packet-based data received via the packet-based communication system and a telephony-based user communication device (*e.g.*, 230 of FIG. 2, page 10:16-29). A processor arrangement (*e.g.*, 130 of FIG. 1 and pages 8 and 9) writes data-intercept select data into and read data-intercept select data from the memory circuit and provides data for communicating with a user via the telephony-based communication device. The processor is further adapted to process data received from, and exchange processed data between, the first user-based telephone communication system and the packet-based communication system, and, in response to the data in the data memory circuit, to intercept information from the packet-based communication system and to store the intercepted information in the data memory circuit. User means for inputting message-retrieval control signals (*e.g.*, 230 or 250 of FIG. 2 and page10:9-16) facilitates the control of message retrieval. The processor arrangement responds to the message-retrieval control signals by displaying messages from the data memory circuit.

As is consistent with claim 65, according to another example embodiment of the present invention, a method is implemented for controlling communications data in a communications system having a NIU, a user interface device, a plurality of telephony-based communications appliances, and a bussing arrangement (*see, e.g.*, FIG. 3 and pages 12:26-13:12, aforesaid system 180, and pages 6:27 through 8:24). The NIU is programmed from the user interface device via the bussing arrangement with configuration information for external-services data. External-services data is received at the NIU and stored in a memory circuit. Responsive to the configuration information, the stored external-services data is configured and the configured data is transferred via the bussing arrangement to one of the telephony-based communications appliances. The transferred external-services data is received at the one telephony-based communications appliance.

VI. Grounds of Rejection to be Reviewed Upon Appeal

1. Claims 1-6, 8-16, 21, 23-28, 30, 32-36, 42-49, 51, 53-59, 63-66, 68, 70 and 74 stand rejected under 35 U.S.C. § 103(a) over Hamlin (U.S. Patent No. 5,574,964) in view of Ellis *et al.* (U.S. Patent Publication No. 2005/0251827).

2. Claims 20 and 50 stand rejected under 35 U.S.C. § 103(a) over Hamlin in view of Ellis *et al.* and further in view of Goldstein (U.S. Patent No. 5,410,326).

3. Claims 7, 22, 29, 31, 37-41, 67 and 75 stand rejected under 35 U.S.C. § 103(a) over Hamlin in view of Ellis *et al.* and in further view of Edens *et al.* (U.S. Patent No. 6,611,537).

4. Claims 17-19, 52 and 60-62 stand rejected under 35 U.S.C. § 103(a) over Hamlin in view of Ellis *et al.* and in further view of Cohen *et al.* (U.S. Patent No. 4,837,798).

5. Claims 69 and 71-73 stand rejected under 35 U.S.C. § 103(a) over Hamlin in view of Ellis *et al.* and in further view of Lewis (U.S. Patent No. 5,835,126).

VII. Argument

All Section 103 rejections must be reversed because the proposed combination of the Ellis reference with the Hamlin reference, upon which all claim rejections rely, does not teach or suggest all of the claimed limitations and is further unmotivated. Appellant notes that each Ground of rejection relies upon this improper combination, with the first Ground of rejection addressing all of the independent claims; in this regard, the impropriety of the rejections under the first Ground of rejection is applicable to each of the other Grounds of rejection.

1. The Section 103 rejections of claims 1-6, 8-16, 21, 23-28, 30, 32-36, 42-49, 51, 53-59, 63-66, 68, 70 and 74 must be reversed; the cited references do not teach or suggest the claimed limitations, and the proposed modification of the primary Hamlin reference with the Ellis reference is unmotivated and contrary to the purpose of the Hamlin reference.

The Section 103 rejections of claims 1-6, 8-16, 21, 23-28, 30, 32-36, 42-49, 51, 53-59, 63-66, 68, 70 and 74, including all of the independent claims, must be reversed because the cited

Hamlin reference does not teach or suggest the claimed limitations as indicated. The Section 103 rejections of claims 1-6, 8-16, 21, 23-28, 30, 32-36, 42-49, 51, 53-59, 63-66, 68, 70 and 74 must also be reversed because the Hamlin reference cannot be modified with the Ellis reference to function in accordance with either the claimed invention or in a manner consistent with the purpose of the Hamlin reference. The Examiner's continued (and confusing) rejection of the claims ignores the requirements for maintaining claim rejections under Section 103 in failing to cite any teaching or suggestion of the storage of external-services data or of the two-way communication of such data with telephony appliances. In addition, the Examiner failed to offer any suggestion of motivation for modifying the Hamlin reference, and cites no evidence of such motivation for modifying the Hamlin reference or as to how the Hamlin reference could function as modified. The following more particularly addresses the improprieties with the Section 103 rejections relating to both the lack of teaching or suggestion of the claimed limitations, and the lack of motivation for the proposed modification.

A. The proposed combination of references does not correspond to the claimed limitations.

As applicable to all Grounds of rejection, the proposed combination of the Ellis reference with the Hamlin reference does not teach or suggest claimed limitations including those directed to a data memory circuit that stores packet-based data (or external-services data), and the selective routing of stored data to appliances that provide bi-directional telephony services. Referring to claim 1 by way of example, an arrangement for processing external-services data in a user facility includes a programmable network interface unit (NIU) that stores external-services data in memory and couples the stored external services data to (bi-directional telephony) appliances as a function of configuration data. The configuration data is provided by way of a user interface, and the provided configuration data is used to command the NIU.

As acknowledged by the Examiner in the Final Office Action, the primary Hamlin reference "does not teach that external services data can be stored in a data memory circuit." As further indicated by the Appellant in previous communications, Hamlin's purpose is unrelated to the storage and selective delivery of external services data; rather, Hamlin is directed to the active conversion and immediate distribution of "distinct input signals into a separate converted frequency signal which becomes a component of a common bus signal" (*see* column 2, lines 10-

14). For instance, Hamlin's database storage 48 as cited by the examiner does not store external services data; as described at column 4, lines 16-32, Hamlin's database 48 stores information used in system control and does not store any external (or internal) services data. In this regard and as is consistent with the Final Office Action, Hamlin neither stores external services data nor delivers the data in accordance with any configuration of the data.

In an effort to modify Hamlin's database 48 and its implementation to arrive at the claimed limitations described above, the Examiner proposed adding Ellis' "server 80" to the Hamlin reference (*see, e.g.*, FIG. 5 paragraph 0074 of the Ellis reference), and concluded that this combination somehow teaches the configured distribution of stored external services data with telephony-based appliances. However, Ellis' discussion of its server 80 does not teach the configured storage and routing of external services data in this manner, and there is no teaching or suggestion supporting the Examiner's assertion that Hamlin's database 48 can store and provide external-services data as suggested. For convenience, Appellant has copied the entire discussion of the Server 80 from the Ellis reference below, which is limited to a single paragraph (0074):

> FIG. 5 shows an illustrative configuration based on a client-server architecture. Server 80 may be connected to user television equipment 81, 82, and 83 via communication paths 85. Equipment 81, 82, and 83 and server 80 may be placed in various rooms within home 65. For example, server 80 may be placed in a den, user television equipment 81 may be placed in a children's room, user television equipment may be placed in a living room, user television equipment 83 may be placed in a parents' room. Communication paths 85 may be any in-home network suitable to transmit video, audio and data, such as dedicated cable fiber optics, firewire links, RF links, etc. As, in the examples of FIGS. 4a, 4b, and 4c, different communications path arrangements such as buses, rings and the like, may be used to interconnect user television equipment based on a client-server architecture.

As clear from the above, neither the Hamlin reference nor Ellis' discussion of its server 80 teach or suggest the storage and distribution of external services data generally or specifically. Furthermore, there is no discussion as to how the server 80 could function with Hamlin's database 48 to carry out the distribution of external services data as claimed, when implemented with Hamlin's converted-frequency signal approach to routing different data types to disparate telephony-based appliances. In short, it appears that the Examiner is suggesting that Hamlin somehow teaches that its database 48 can store and serve external-services data, and that the various appliances (*e.g.*, televisions) coupled to its system may use any data, even where that

data is meant for other appliances, simply because different communication signals are passed on a common bus. As discussed previously, these suggestions are unsupported by any cited teachings in the Hamlin reference.

In view of the above, the cited references fail to teach, suggest or comprehend the storage of external services data as claimed. In this regard, the proposed combination of references does not establish a *prima facie* case of obviousness and the Section 103(a) rejections must be reversed.

B. The proposed modification of the Hamlin reference is unmotivated.

Also as applicable to all Grounds of rejection, the Section 103 rejections must be reversed because there is no motivation to modify the primary Hamlin reference with the Ellis reference. The Final Office Action and the Examiner's response to Appellant's traversals regarding this lack of motivation stop short of addressing the requirements for establishing obviousness. In citing *In re Fine* (837 F.2d 1071), the Examiner has suggested that obviousness can only be established by combining or modifying teachings of the prior art where there is teaching, suggestion or motivation to do so. However, the Examiner has failed to cite any such teaching, suggestion or motivation and the Examiner's opinion as to any motivation is unsupported. Specifically, a Section 103(a) rejection must be supported by evidence that the prior art would lead a skilled artisan to implement the modification. *Ruiz v. A.B. Chance Co.*, 234 F.3 654; 57 USPQ.2D 1161 December (December 6, 2000) ("Our court has provided [that the] motivation to combine may be found explicitly or implicitly: 1) in the *prior art references* themselves; 2) in the knowledge of those of ordinary skill in the art that *certain references*, or disclosures in those references, are of special interest or importance in the field; or 3) from the nature of the problem to be solved, 'leading inventors to look to *references* relating to possible solutions to that problem.'")(emphasis added). In this instance, the Examiner has not presented any evidence from the asserted references indicating that a skilled artisan would use (or modify) the cited references to correspond to the claimed invention and instead has used hindsight reasoning in an attempt to piece together disparate teachings.

Further, the Examiner's opinion regarding motivation for the proposed modification of the Hamlin reference is flawed because the alleged motivation is silent as to any storage and

distribution of external-services data (for telephony devices) as claimed, is silent as to any motivation for modifying Hamlin's database to store external-services data (*e.g.*, needing far greater storage capacity), and thus is unrelated to the (implicitly) proposed modification of the Hamlin reference. The Examiner's opinion that it would have been obvious to modify Hamlin "to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home" is unsupported by any evidence from the prior art and fails to provide any rationale for modifying Hamlin and ostensibly replacing its database 48 with one that can store external-services data. That is, the Final Office Action does not cite evidence that explains why one of skill in the art, when viewing the Ellis and Hamlin references, would have been motivated to store and serve external-services data to telephony devices as neither of the references teach or suggest such an approach. Moreover, the proposal on page 6 of the Final Office Action suggesting that the Ellis reference "cures [Hamlin's] deficiency" regarding the storage of external-services data ignores the fact that the Hamlin patent has not been deemed deficient in that its database 48 serves its function in storing information used to operate Hamlin's system. Appellant submits that replacing Hamlin's database with something that can store video data as suggested by the Examiner, particularly at the time of the invention, would have added significant cost and complexity to Hamlin's system, which is unnecessary for Hamlin to meet its purpose and is therefore further unmotivated.

Thus, the skilled artisan would not be led by the prior art to implement the modifications proposed by the Examiner. Without presentation of any evidence from the cited teachings indicating that one skilled in the art would combine the cited references to achieve the limitations of the claimed invention, the Section 103(a) rejections are improper and should be reversed.

In view of the above, all of the claim rejections are improper because each relies upon the combination of the Ellis reference with the primary Hamlin reference which fail to teach or suggest all of the claimed limitations, and because the Examiner has failed to cite evidence in support of the proposed combination of references. The above arguments therefore apply to other grounds of rejection discussed below. In this regard, the rejections of claims 1-6, 8-16, 21, 23-28, 30, 32-36, 42-49, 51, 53-59, 63-66, 68, 70 and 74 as discussed above with the first

Ground of rejection, as well as the rejections of the remaining claims discussed below in connection with other Grounds of rejection, should all be reversed.

2. The section 103 rejection of claim 20 and 50 should be reversed for the reasons stated above with the first Ground of rejection and because the modification of the Hamlin reference with the Goldstein reference is further unmotivated.

As claim 20 depends from claim 1 and claim 50 depends from claim 46, Appellant submits that the discussion above with the first ground of rejection applies here. "If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious." M.P.E.P. § 2143.03; *citing In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). In view of the above, the rejection of claims 20 and 50 is improper because cited portions of the Hamlin and Ellis references fail to teach or suggest all of the claimed limitations, and because the proposed modification of the Hamlin reference is unmotivated.

The rejection of claims 20 and 50 is further improper because the Final Office Action also failed to cite any evidence of motivation for modifying Hamlin to include Goldstein's remote-control configuration using a security-code. As similar to the issues discussed above regarding the improper combination of Ellis with Hamlin, the Final Office Action provides an opinion as to motivation for modifying Hamlin, without citing any evidence or providing any explanation specific to the Hamlin reference and the proposed modification. That is, the Examiner's opinion that it would have been obvious "to use a security code in the remote controller, in order to allow for tighter security and use by only those authorized users" fails to describe where Hamlin uses a remote controller or why Hamlin would be susceptible to any security issues. Therefore, Appellant submits that the rejection of claims 20 and 50 must also be reversed.

3. The Section 103 rejection of claims 7, 22, 29, 31, 37-41, 67 and 75 should be reversed for the reasons stated above with the first Ground of rejection, and because the modification of the Hamlin reference with the Edens reference is further unmotivated.

As claims 7, 22, 29, 31 and 37-41 depend from claim 1, and as claims 67 and 75 depend from claim 65, Appellant submits that the discussion above with the first ground of rejection applies here. "If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious." M.P.E.P. § 2143.03; *citing In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). In view of the above, the rejection of claims 7, 22, 29, 31, 37-41, 67 and 75 is improper because cited portions of the Hamlin and Ellis references fail to teach or suggest all of the claimed limitations, and because the proposed modification of the Hamlin reference is unmotivated.

The rejection of claims 7, 22, 29, 31, 37-41, 67 and 75 is further improper because the Final Office Action again failed to cite any evidence of motivation for modifying Hamlin, here to include the various subject matter cited in the Edens reference. For instance, in individually discussing the rejection of dependent claims 7, 22, 29, 31, 37-41, 67 and 75 on pages 29-33, the Final Office Action fails to cite a single reference evidencing motivation for modifying the Hamlin reference. Instead of citing evidence, each of these claim rejections relies upon the Examiner's opinion as to the modification of Hamlin's frequency-based system (*e.g.*, to include DTMF-tone control). None of these rejections cite any evidence supporting the modification of the Hamlin reference to include any additional circuitry, programming or other items to facilitate the proposed modification, nor do any of the rejections describe how the Hamlin reference could operate as so modified. Therefore, Appellant submits that the rejection of claims 7, 22, 29, 31, 37-41, 67 and 75 must also be reversed.

4. The Section 103 rejection of claims 17-19, 52 and 60-62 should be reversed for the reasons stated above with the first Ground of rejection, and because the modification of the Hamlin reference with the Cohen reference is further unmotivated.

As claims 17-19 depend from claim 1, as claim 52 depends from claim 46, and as claims 60-62 depend from claim 55, Appellant submits that the discussion above with the first ground of rejection applies here. "If an independent claim is nonobvious under 35 U.S.C. § 103, then any

claim depending therefrom is nonobvious." M.P.E.P. § 2143.03; *citing In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). In view of the above, the rejection of claims 17-19, 52 and 60-62 is improper because cited portions of the Hamlin and Ellis references fail to teach or suggest all of the claimed limitations, and because the proposed modification of the Hamlin reference is unmotivated.

The rejection of claims 17-19, 52 and 60-62 are further improper because the Final Office Action failed to show teaching or suggestion of all of the claimed limitations, and further failed to cite any evidence of motivation for modifying Hamlin to include the various subject matter cited in the Cohen reference. For example, in discussing the limitations of claim 17 directed to the conversion of word processing to audio data, the Final Office Action cites Cohen as teaching "multiple data forms for use in a unified system" but fails to cite any portion of Cohen that teaches or suggests the aforesaid limitations in claim 17. The motivation alleged on page 34 of the Final Office Action, "to create a more comprehensive and consistent facility" is confusing in its applicability to either the Hamlin reference or the claimed limitations and any modification of Hamlin to include converting word-processing data to audio data. Other claim rejections under this fourth ground of rejection are similarly confusing, lacking in correspondence and motivation. As with the rejection claim 17, the rejection of each of claims 18-19, 52 and 60-62 relies upon the Examiner's opinion as to the modification of Hamlin's frequency-based system, generally relying on alleged motivation similar to that alleged with the rejection of claim 17, without citing any evidence in support of this modification. None of these rejections cite any evidence supporting the modification of the Hamlin reference to include any additional circuitry, programming or other functionality to facilitate the proposed modifications, nor to any of the rejections describe how the Hamlin reference could operate as so modified. Therefore, Appellant submits that the rejection of claims 17-19, 52 and 60-62 must also be reversed.

5. The Section 103 rejection of claims 69 and 71-73 should be reversed for the reasons stated above with the first Ground of rejection, and because the modification of the Hamlin reference with the Lewis reference is further unmotivated.

As claims 69 and 71-73 depend from claim 65, Appellant submits that the discussion above with the first ground of rejection applies here. "If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious." M.P.E.P. § 2143.03; *citing In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). In view of the above, the rejection of claims 69 and 71-73 is improper because cited portions of the Hamlin and Ellis references fail to teach or suggest all of the claimed limitations, and because the proposed modification of the Hamlin reference is unmotivated.

The rejection of claims 69 and 71-73 are further improper because the Final Office Action failed to show teaching or suggestion of all of the claimed limitations, and further failed to cite any evidence of motivation for modifying Hamlin to include the various subject matter cited in the Lewis reference. For example, in discussing the limitations of claim 69 directed to the assignment of a television subscription package, the Final Office Action indicates that the Cohen reference "utilizes some sort of subscription package to manage accounts and billing." Appellant submits that this supposition that "some sort of subscription package" could be referenced falls far short of the Section 103 requirement that the cited references teach or suggest all of the claim limitations. As the cited portions of the Cohen reference do not specifically disclose such subject matter, it appears that the Examiner is relying upon an inherency-type argument but fails to provide the requisite data showing that the missing limitations must be present. The Examiner uses similar rationale in rejecting claims 71-73. Appellant submits that such arguments, without support, are improper and insufficient in maintaining the Section 103 rejections.

Regarding the lack of evidence of motivation for modifying the Hamlin reference, the Examiner again states an opinion as to the desirability of the proposed modification, here "to allow for pay-per-view movies and more options for standard interactive television within the home system" without citing any supporting evidence. For instance, there is no teaching or suggestion as to why one of skill in the art would be motivated to so modify Hamlin's frequency-based system, nor as to how the Hamlin reference could operate as so modified. Therefore, Appellant submits that the rejection of claims 69 and 71-73 must also be reversed.

VIII. Conclusion

In view of the above, Appellant submits that the rejections of claims 1-75 are improper. Appellant therefore requests reversal of the rejections as applied to the appealed claims and allowance of the entire application.

Authority to charge the undersigned's deposit account was provided on the first page of this brief.

Respectfully submitted,

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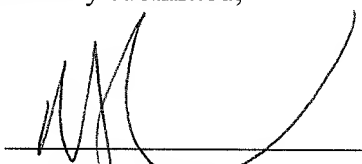
By: 
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CLAIMS APPENDIX
(S/N 09/740,263)

1. (previously presented) An arrangement for processing external-services data for use in a user facility that provides its users telephony-related services, the arrangement comprising:

an audio, video, and data signal bussing arrangement adapted to distribute audio, video, and data to designated points in the user facility;

a plurality of telephony-based appliances communicatively coupled to the bussing arrangement, wherein the plurality of appliances provide bi-directional telephony services using at least one of: audio, video, and data signals;

at least one data memory circuit adapted to store external-services data and adapted to store configuration data;

a programmable network interface unit (NIU) adapted to store external-services data in the memory circuit and to communicatively couple the stored external services data from the memory circuit to the plurality of appliances in the user facility via the bussing arrangement as a function of the configuration data in the memory circuit; and

a user input device adapted to access the data stored in the memory circuit, to program the programmable NIU by providing the configuration data and to command the NIU via the bussing arrangement to process the external-services data for use at a particular one of the plurality of appliances in the user facility.

2. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the user input device includes one of the plurality of appliances.

3. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the plurality of appliances includes at least one of: a TV, a phone, a computer, a printer, a videophone, a videocassette recorder, an analog recorder, a digital recorder, a stereo, a camera, a wireless phone, an intercom, an audio speaker, and a pager.

4. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the user input device includes at least one of: a TV, a phone, a computer, a videophone, a videocassette recorder, a wireless phone, an audio speaker, a pager, a

remote control, a modem, a voice recognition system, an Internet access device, a keypad, and a touch screen.

5. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the bussing arrangement includes at least one of: a coaxial cable, a telephony line, a T1 line, an ISDN line, a DSL line, an infrared transmitter, a wireless transmitter, a telephone modem, a wireless modem, a cable modem, a broadband modem, and a computer network.

6. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the user input device includes a television remote adapted to select NIU commands from a display generated by the NIU and displayed on the television.

7. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the user input device includes a telephone adapted to select NIU commands from a command menu programmed into the NIU.

8. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the NIU is further adapted to configure the external services data for use at a particular one of the plurality of appliances.

9. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 8, wherein the external services data includes audio and video data, and wherein the NIU is adapted to configure the audio data for use at an audio appliance and to configure the video data for use at a video appliance.

10. (Previously Presented) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the NIU includes the data memory circuit.

11. (Previously Presented) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the NIU is adapted to store incoming external

services data at the data memory circuit until a routing command is received from the user input device, and to route the external services data directly from the data memory circuit in response to the received routing command.

12. (Previously Presented) An arrangement for processing external-services data for use in a user facility, according to claim 11, wherein the user input device is adapted to communicate with the NIU and determine the type of external-services data that is stored.

13. (Previously Presented) An arrangement for processing external-services data for use in a user facility, according to claim 12, wherein the user input device is adapted to determine the source of the external-services data.

14. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 10, wherein the NIU is adapted to store configuration information in the data memory circuit, wherein the configuration information includes routing information for external services data.

15. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the external-services data includes data having a first data form, and wherein the NIU is adapted to convert the external services data into a second data form for use by a particular one of the plurality of appliances.

16. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 15, wherein the first data form includes packet-based data, and wherein the second data form includes non-packet-based data.

17. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 15, wherein the first data form includes word processing data, and wherein the second data form includes audio data.

18. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 17, wherein the first data form includes an email message, and wherein the NIU is adapted to read and convert the email into an audio message.

19. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 15, wherein the first data form includes audio data, and wherein the second data form includes word processing data.

20. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the user input device is further adapted to include a security code, and wherein the NIU is further adapted to respond only to commands having the security code.

21. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the plurality of appliances include a TV, and wherein NIU is adapted to display the configuration of the plurality of appliances on the TV screen.

22. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 21, and wherein the configuration data includes telephone data including at least one of: the telephone number assigned to the phone, call waiting options, caller ID options, answering options, forwarding options, message storage options, call blocking options, and call screening options.

23. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 21, wherein the user input device is adapted to command the NIU based upon the configuration display on the TV screen.

24. (Previously Presented) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein one of the plurality of appliances includes a display, and wherein the NIU is adapted to display the stored incoming external services data on the display.

25. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 24, wherein the user input device is adapted to command the NIU based upon the displayed incoming external services data.

26. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 25, wherein the NIU is adapted to display email, audio messages, and video messages, and wherein the user input device is adapted to respond to an input corresponding to the displayed information and to command the NIU to route the displayed information to a particular one of the plurality of appliances.

27. (Previously Presented) An arrangement for processing external-services data for use in a user facility, according to claim 1, further comprising a digital memory circuit coupled to the NIU, wherein the external-services data is digital data and is stored in the digital memory circuit.

28. (Previously Presented) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the external-services data is stored at a location external from the NIU.

29. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the NIU includes a processor adapted to function as an answering machine for incoming telephony calls.

30. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the user input device is coupled to the bussing arrangement and uses the bussing arrangement to command the NIU.

31. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 30, wherein the NIU is adapted to receive configuration information in the form of DTMF tones, wherein the bussing arrangement includes a two-wire analog system, and wherein the user input device is adapted to send control signals to the NIU including DTMF tones.

32. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the user input device is adapted to send control signals to the NIU that are configured to enable the control of external-data services including at least one of: caller ID information, address book information, pay-per-view access information, downloadable multimedia information, dynamically allocable telephone numbers, call forwarding, message on hold, directory assistance, and household systems control information.

33. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the NIU includes a printed circuit board (PCB) having at least one general processor and at least one specific processor adapted to process video data.

34. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 33, wherein the PCB includes a RISC processor.

35. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 33, wherein the PCB includes a DSP processor.

36. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein each of the plurality of appliances is adapted to deliver status information signals to the NIU including the status of the appliance sending the signal, further comprising a user interface device adapted to access and provide the status information to a user.

37. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the plurality of appliances includes a microphone adapted for use in an intercom system.

38. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 37, further comprising a monitoring device coupled and adapted to receive audio signals from the microphone and, responsive to detecting an audio signal above a threshold level, send an alert signal to a user via the NIU.

39. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 38, wherein the microphone is located near an infant, and the system is used to monitor the infant.

40. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 39, wherein the alert includes a page signal.

41. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 38, wherein the microphone is adapted to monitor noise for security monitoring.

42. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 1, further comprising an appliance interface device coupled to an appliance and to the bussing arrangement and adapted to receive a first type of signal and convert the data signal to a second type of data signal.

43. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 42, wherein the appliance interface device is further adapted to receive a signal via a first type of communications line and to transmit the signal via a second type of communications line.

44. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 42, wherein the appliance interface device is programmable via a user input.

45. (Original) An arrangement for processing external-services data for use in a user facility, according to claim 42, wherein the appliance interface device is programmable by an external-services provider via the NIU.

46. (previously presented) A network interface system for interfacing different types of communication systems including a first user-based telephone communication system and a packet-based communication system, comprising:

a data memory circuit adapted to store configuration data and packet-based data from the packet-based communication system;

a telephony-based user communication device;

a processor arrangement adapted to write configuration data into and read configuration data from the memory circuit and to provide data for presenting configuration information for accessing at the telephony-based user communication device, further adapted to process data received from, and exchange processed data between, the first user-based telephone communication system and the packet-based communication system, and, in response to the configuration data, also adapted to route selected information provided by the packet-based communication system and to route data stored at the data memory circuit to selected channels of the first user-based telephone communication system;

user input means for inputting configuration-defining control signals, wherein the processor arrangement responds to the configuration-defining control signals by changing the configuration data in the memory circuit and by rerouting selected information provided by the packet-based communication system to selected channels of the first user-based telephone communication system according to the configuration-defining control signals.

47. (Original) A network interface system, according to claim 46, further comprising a network system coupled to the first user-based communications system.

48. (Original) A network interface system, according to claim 46, wherein the user input means includes at least one of: an IR key panel , a wall-mount unit for the system, a TV, a telephone, a computer, a videophone, a videocassette recorder, a wireless phone, a remote control, a modem, a voice recognition system, an Internet access device, a keypad, and a touch screen.

49. (Original) A network interface system, according to claim 46, wherein the processor arrangement is further adapted to write configuration data into the memory circuit in response to signals received from the packet-based communication system

50. (Original) A network interface system, according to claim 46, wherein the processor arrangement is further adapted to permit reconfiguration in response to a user-provided security code.

51. (Original) A network interface system, according to claim 46, wherein the user communication device includes at least one of: a TV monitor, a printer, and computer.

52. (Original) A network interface system, according to claim 46, wherein the user communication device includes a voice generating unit adapted to produce prerecorded messages.

53. (Original) A network interface system, according to claim 46, wherein the user input means includes a computer adapted to communicate on the Internet.

54. (Original) A network interface system, according to claim 46, wherein the packet-based communication system includes at least one of: a cable modem, a wireless modem, a broadband modem, a telephone modem, a DSL, a T1 line, and a computer network.

55. (previously presented) A network interface system for interfacing different types of communication systems including a first user-based telephone communication system and a packet-based communication system, comprising:

a data memory circuit adapted to store data including packet-based data received via the packet-based communication system;

a telephony-based user communication device;

a processor arrangement adapted to write data-intercept select data into and read data-intercept select data from the memory circuit and to provide data for communicating with a user via the telephony-based communication device, further adapted to process data received from, and exchange processed data between, the first user-based telephone communication system and the packet-based communication system, and, in response to the data in the data memory circuit, also adapted to intercept information from the packet-based communication system and to store the intercepted information in the data memory circuit;

user means for inputting message-retrieval control signals, wherein the processor arrangement responds to the message-retrieval control signals by displaying messages from the data memory circuit.

56. (Original) A network interface system, according to claim 55, wherein the user input means is at least one of: an IR key panel , a wall-mount unit for the system, a TV, a telephone, a computer, a videophone, a videocassette recorder, a wireless phone, a remote control, a modem, a voice recognition system, an Internet access device, a keypad, and a touch screen.

57. (Original) A network interface system, according to claim 55, wherein the processor arrangement is further adapted to write data-intercept select data into the memory circuit in response to signals received from the packet-based communication system

58. (Original) A network interface system, according to claim 55, wherein the processor arrangement is further adapted to write data-intercept select data into the memory circuit in response to signals received from the input means.

59. (Original) A network interface system, according to claim 55, wherein the user communication device includes a TV monitor.

60. (Original) A network interface system, according to claim 55, wherein the user communication device includes a voice generating unit adapted to produce prerecorded messages.

61. (Original) A network interface system, according to claim 60, wherein the voice generating unit audibly produces the prerecorded messages over the user communication device.

62. (Original) A network interface system, according to claim 61, wherein the user communication device is communicating a first audio signal, and wherein the prerecorded messages are audibly produced at a sound level over that of the first audio signal.

63. (Original) A network interface system, according to claim 55, wherein the user communication device includes a computer adapted to communicate on the Internet.

64. (Original) A network interface system, according to claim 55, wherein the packet-based communication system includes at least one of: a cable modem, a wireless modem, a broadband modem, a telephone modem, a DSL, a T1 line, and a computer network.

65. (previously presented) A method for controlling communications data in a communications system having a NIU, a user interface device, a plurality of telephony-based communications appliances, and a bussing arrangement the method comprising:

programming the NIU from the user interface device via the bussing arrangement with configuration information for external-services data;

receiving external-services data at the NIU;

storing the received external-services data in a memory circuit;

responsive to the configuration information, configuring the stored external-services data and transferring the configured data via the bussing arrangement to one of the telephony-based communications appliances; and

receiving the transferred external-services data at the one telephony-based communications appliance.

66. (Original) The method of claim 65, wherein programming the data receiving unit with configuration information includes programming routing information for routing the external-services data to particular ones of a plurality of communications devices.

67. (Original) The method of claim 66, wherein the particular ones of a plurality of communications devices include a telephony device, and wherein the routing data includes the assignment of a particular telephone number to the telephony device.

68. (Original) The method of claim 66, wherein the particular ones of a plurality of communications devices include an Internet device, and wherein the routing data includes the assignment of a particular Internet protocol address to the Internet device.

69. (Original) The method of claim 66, wherein the particular ones of a plurality of communications devices include a TV, and wherein the routing data includes the assignment of a particular television subscription package to the TV.

70. (Original) The method of claim 65, wherein using the user interface device and programming the NIU with configuration information for external-services data includes programming from an external-services provider location, wherein the configuration information controls the type of external services that the NIU passes to the plurality of communications devices.

71. (Original) The method of claim 70, wherein the external-services data includes television data, and wherein the external-services provider location programs the NIU with a television subscription package.

72. (Original) The method of claim 71, wherein the television subscription package includes a specified number of television sets that can use the television data.

73. (Original) The method of claim 71, wherein the television subscription package includes a pay-per-view event.

74. (Original) The method of claim 70, wherein the external-services data includes packet-based data, and wherein the external-services provider location programs the NIU with a packet-based access package.

75. (Original) The method of claim 70, wherein the external-services data includes telephony-based data, and wherein the external-services provider location programs the NIU with a telephony-based access package.

APPENDIX OF EVIDENCE

Appellant is unaware of any evidence submitted in this application pursuant to 37 C.F.R. §§ 1.130, 1.131, and 1.132.

APPENDIX OF RELATED PROCEEDINGS

As stated in Section II above, Appellant is unaware of any related appeals, interferences or judicial proceedings.